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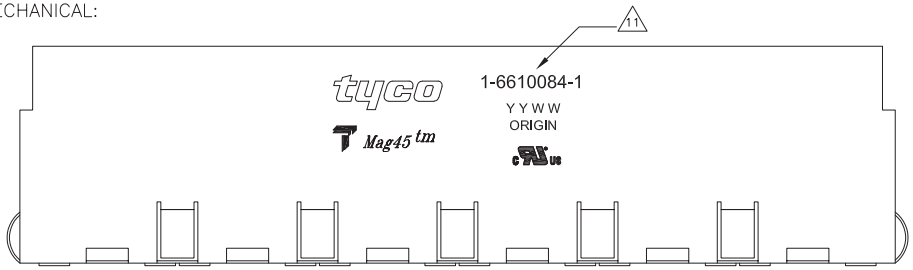
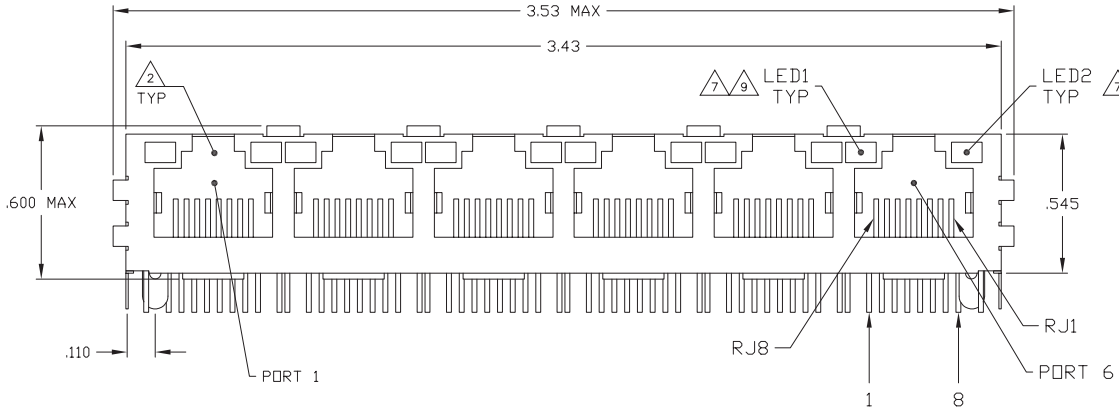
LOC	DIST
AA	22

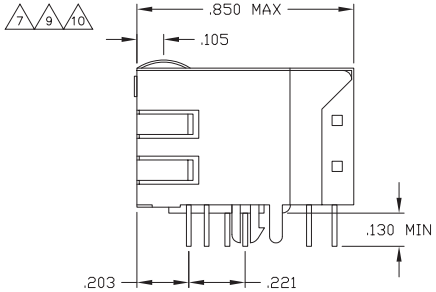
REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	A	REV PER EC 0S13-0650-04	17MAR2005	LV	DF/CG

MECHANICAL:







1. MATERIALS:
-HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0.
-SHIELD - .010" THICK, C26800 BRASS PREPLATED WITH 30µINCH MIN SEMI-BRIGHT NICKEL.SOLDER TABS POST DIPPED WITH 100µINCH MIN SAC SOLDER.
-MOD JACK CONTACTS - 0.0157 X 0.018" PHOSPHOR BRONZE, 50µINCH MIN OVERALL NICKEL UNDERPLATE WITH SELECT 50µINCH MIN HARD GOLD FINISH PLATE. SOLDERTAILS WITH 100µINCH MIN MATTE TIN AND/OR SAC SOLDER DIP.
-LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, .020" X .020" CARBON STEEL WIREFRAME LEADS PRE-PLATED WITH 80µINCH SILVER OVER 40µINCH NICKEL UNDERPLATE OVER 40µINCH COPPER UNDERPLATE. POST-PLATED WITH 100µIN MIN MATTE TIN AND/OR SAC SOLDER DIP OR PURE TIN SOLDER DIP.

2. RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB PART F.

3. MAGNETICS
-IMPEDANCE: 100 OHMS
-TURNS RATIO (CHIP:CABLE): TX = 1:1, RX = 1:1
-OPEN CIRCUIT INDUCTANCE (OCL): 350mH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, TX AND RX
-PERFORMANCE @ 25°C:
INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
RETURN LOSS (RL): 18dB MIN FROM 0.5MHZ TO 30MHz
18-20LOG(f/30)dB MIN FROM 30.1MHz TO 60MHz
12dB MIN FROM 60.1MHz TO 80MHz
CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz
33-20×LOG(f/50)dB MIN FROM 40.1MHz TO 100MHz
COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz
-ISOLATION VOLTAGE: COMPLIES WITH IEEE802.3 2002, PARA 23.5.1.1, ITEM a or b.

4. C1 IS AN OPTIONAL 1000pF, 2KV DECOUPLING CAPACITOR.

5. OPERATING TEMPERATURE: FROM 0°C TO +70°C.

6. R1-R4 = 75 OHMS, 1/16 W, 5%.

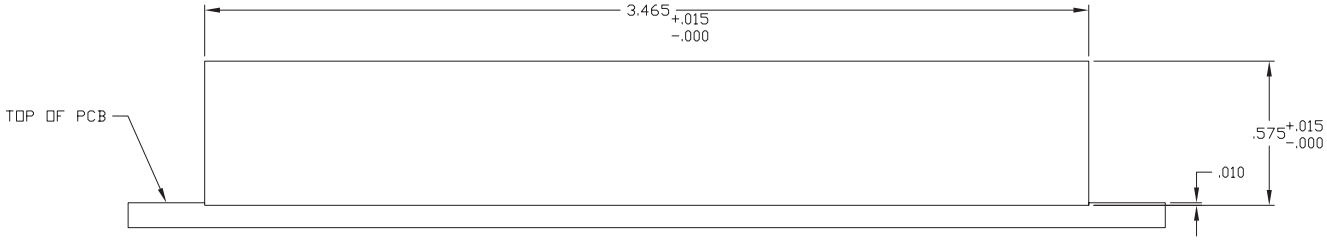
7. LED COMPLIANT WITH IEC60825-1 SAFETY OF LASER PRODUCTS. WHEN OPERATED UP TO 20 mA. THE 250 OHM RESISTOR IS INCLUDED.

8. INDICATED CONNECTIONS ARE FOR A HUB CONFIGURATION. THE MAGNETICS ARE ASYMMETRICAL AND DO NOT SUPPORT AUTO-MDIX.

9. GREEN LED PEAK WAVELENGTH(λ)=565nm.

10. YELLOW LED PEAK WAVELENGTH(λ)=585nm.

11. TRADEMARK, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.



1X6 SUGGESTED PANEL CUTOUT

YES	GREEN	YELLOW	5-6610084-1
NO	GREEN	GREEN	1-6610084-1
DECOUPLING CAPACITOR 4	LED1	LED2	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± -
1 PLC ± -
2 PLC ± .010
3 PLC ± .005
4 PLC ± -
ANGLES ± -

MATERIAL 1
FINISH 1

DWN L. VARELA - DOCKS 17MAR2005
CHK D. FAROLE 17MAR2005
APVD D. FAROLE 17MAR2005

PRODUCT SPEC 108-2100
APPLICATION SPEC -
WEIGHT -

Tyco Electronics Corporation
Harrisburg, PA 17105-3608

NAME 1X6 MAG45(TM) MODULAR JACK, 7H5 SCHEMATIC, 54 SERIES CIRCUIT, OPTIONAL DECOUPLING CAPACITOR, SHIELDED, WITH RESISTOR LEDS

SIZE A1 | CAGE CODE 00779 | DRAWING NO C-6610084 | RESTRICTED TO -

CUSTOMER DRAWING | SCALE 4:1 | SHEET 1 OF 2 | REV A

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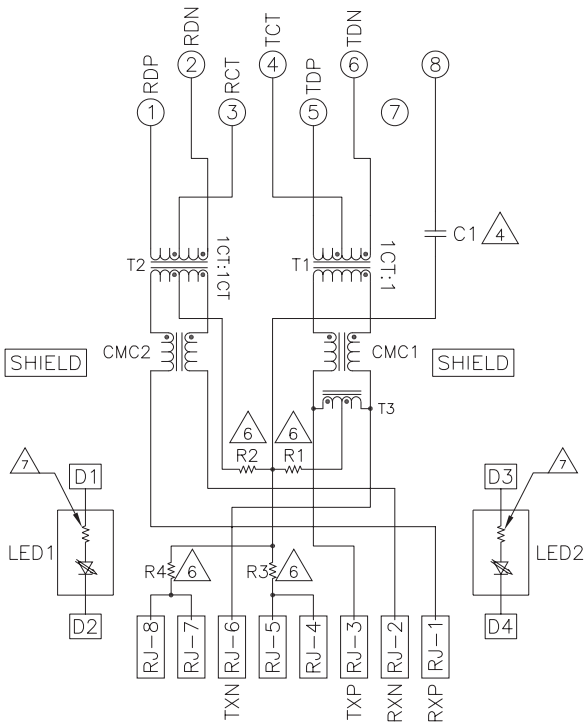
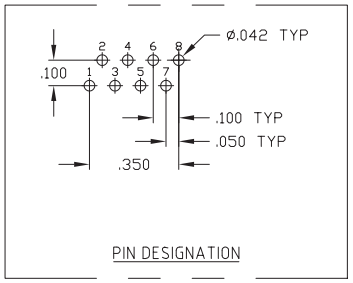
LOC	DIST
AA	22

REVISIONS

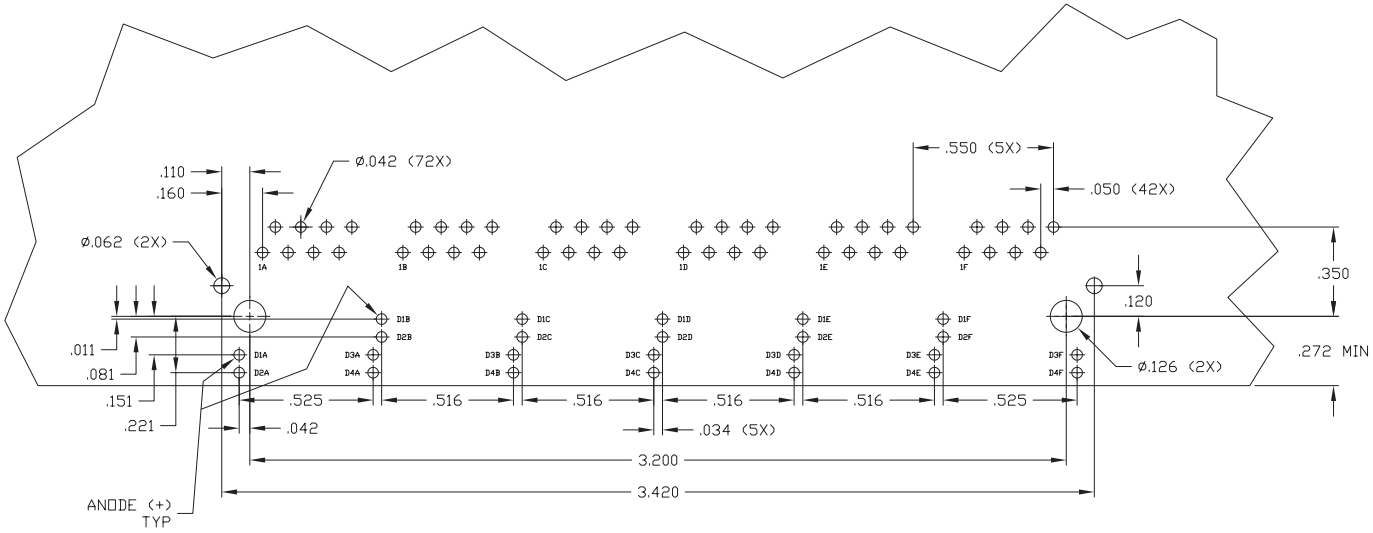
P	LTR	DESCRIPTION	DATE	DWN	APVD
	—	SEE SHEET 1	—	—	—

754 SERIES MAGNETIC CIRCUIT (3) (8)





PIN DESIGNATION



SUGGESTED PCB LAYOUT
(Component Side)

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± –
1 PLC ± –
2 PLC ± .010
3 PLC ± .005
4 PLC ± –
ANGLES ± –

MATERIAL –
FINISH –

DRN L. VARELA – DOCK 17MAR2005
CHK D. FAROLE 17MAR2005
APVD D. FAROLE 17MAR2005

PRODUCT SPEC 108-2100
APPLICATION SPEC –
WEIGHT –

Tyco Electronics Corporation
Harrisburg, PA 17105-3608

NAME 1X6 MAG45(TM) MODULAR JACK, 7H5 SCHEMATIC, 54 SERIES CIRCUIT, OPTIONAL DECOUPLING CAPACITOR, SHIELDED, WITH RESISTOR LEDS

SIZE A1 | CAGE CODE 00779 | DRAWING NO C-6610084 | RESTRICTED TO –

CUSTOMER DRAWING | SCALE 4:1 | SHEET 2 OF 2 | REV A